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November 27th, 1959 COCOM Document No. 3715.44/1B

COORDINATING COMMITTEE

RECORD OF DISCUSSION

ON

ITEM 1544 - CRYSTAL SIGNAL DIODES

9th and 17th November, 1959

Present: Belgium (Luxembourg), Canada, France, Germany, Italy, Japan, Netherlands, United Kingdom, United States.

References: COCOM 3700.1, 3715.00/1 and W.P.1544/1 to 4.

1. The COMMITTEE studied the German redefinition proposal which would have the following effect: in sub-item (a) to raise the frequency cut-off to 1,000 Mc/s, in order to free germanium diodes chiefly used in television; and in sub-item (b) to exclude diodes chiefly used at low frequencies (on electric locomotives, for example).

2. The NETHERLANDS Delegation felt that the German amendment to sub-item (a) was premature and involved the risk of freeing television material using transistors. On the other hand, they supported the German proposal regarding sub-item (b).

3. The UNITED STATES Delegation stressed the advantages from the administrative point of view of separating signal diodes from power diodes.

4. The COMMITTEE instructed the Working Group to draw up a definition to reconcile the various positions which had been stated. The definition submitted by the Working Group in W.P.1544/4 read as follows:

> "Semiconductor diodes, including rectifier diodes and switching diodes, but excluding photodiodes (see Item 1548) as follows:
> (a) Any semiconductor diode in which the bulk material is other than silicon, germanium, selenium or copper-oxide;
> (b) Signal diodes, (including mixer, frequency-changing and switching diodes)
> (1) Point contact type diodes in which the bulk material is silicon and which are designed for use at input frequencies greater than 300 Mc/s;
> (2) Point contact type diodes in which the bulk material is germanium and which are designed for use at input frequencies greater than 1,000 Mc/s;
> (3) Junction type diodes in which the bulk material is silicon and which are designed for use at input frequencies greater than 1 Mc/s or switching rates (repetition frequency) higher than 100 kc/s;
> (4) Junction type diodes in which the bulk material is germanium and which are designed for use at input frequencies greater than 300 Mc/s or switching rates (repetition frequency) higher than 1 Mc/s;
> (c) (1) Power diodes in which the rated peak inverse voltage at 25°C and under any conditions of cooling exceeds 1,000 volts per junction;
> (2) Controlled diodes (i.e. those which operate similarly to gridcontrolled gas-filled tubes) designed for use at switching rates (repetition frequency) higher than 100 kc/s."

5. This new definition was accepted ad referendum by the CANADIAN, FRENCH, ITALIAN, JAPANESE, NETHERLANDS and UNITED STATES Delegations, while the BELGIAN, GERMAN and UNITED KINGDOM Delegations gave thier final agreement.

6. On the 17th November, the NETHERLANDS Delegate informed the Committee that his Delegation intended to submit a redefinition proposal for Item 1544 (see W.P. 1544/5).

CONCLUSION: The COMMITTEE took note of the Netherlands Delegate's statement, while registering the agreement in principle of all Delegations to the definition set out above. They agreed to study the Netherlands proposal during the second round of the review of the Electronics Category.

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